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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,319	07/02/2001	G. Scott Smith	020699-000310US	4767

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CARPENTER & KULAS, LLP  
1900 EMBARCADERO ROAD  
SUITE 109  
PALO ALTO, CA 94303

EXAMINER
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GELAGAY, SHEWAYE

ART UNIT	PAPER NUMBER
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2133

DATE MAILED: 10/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/898,319

Applicant(s)

SMITH ET AL.

Examiner

Shewaye Gelagay

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 July 2001.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-7 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 09/24/04.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

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## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

2. Claims 1-4 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cane et al. United States Letters Patent Number 5,940,507 in view of Noda et al. United States Letters Patent Number 6,671,759.

As per claim 1:

Cane et al. teach a method comprising:

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encrypting a first key for decrypting the encrypted content to form a second key; (Col. 3, lines 59-60; The master encryption key is obtained and used to encrypt the secondary key and produce an encrypted key)

combining the encrypted content with the second key to form a combined encrypted content stream;(Col. 4 lines 20-22; the encrypted key is then written to a tape index disk file thereby associating the magnetic tape volume with the encrypted file and the encrypted key.) and

storing the combined encrypted content stream on the storage media. (Col. 4; lines 17-20; the archive server writes the encrypted file to a magnetic tape, or other medium of long term storage.) (Col. 4, lines 21-22; The encrypted key is then written to a tape index file)

Cane et al. do not explicitly disclose receiving the encrypted content via the IEEE 1394 bus.

Noda et al. in analogous art, however, disclose receiving the encrypted content via the IEEE 1394 bus. (Col. 14; lines 6-8; the encrypted data is received by the IEEE 1394 Interface of the optical disk drive through the IEEE 1394 bus)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Cane et al. to include a step of receiving the encrypted content via the IEEE 1394 bus. This modification would have been obvious because a person having ordinary skill in the art would have been motivated by the suggestions, provided by Noda et al. (Col. 1; lines 18-19) in order to have high transmission speed and mutual communications between electronic devices.

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As per claim 2:

Cane et al. and Noda et al. teach all the subject matter as described above. In addition, Cane et al. further teach,

retrieving the combined encrypted content stream from the storage media; (Col. 4; lines 27-28; recovery of a file is accomplished by the archive server referencing the index to obtain the encrypted key and the volume of the encrypted file. The encrypted file is then retrieved from the volume)

decrypting the second key to obtain the first key; (Col. 4; lines 24-35; the secondary key must be recovered by decrypting the encrypted key with the master key.) and

decrypting the encrypted content with the first key to recover clear text content. (Col. 4; lines 35-36; the original file may be recovered by decrypting the encrypted file with the secondary key.)

As per claim 3:

Cane et al. teach a method comprising:

encrypting the first key to form a second key; (Col. 3, lines 59-60; The master encryption key is obtained and used to encrypt the secondary key and produce an encrypted key) and

forwarding the second key and the encrypted data. (Col. 3, lines 65-66; the encrypted file and encrypted key are then transmitted to the archive server.)

Cane et al. do not explicitly disclose receiving a transmission of the encrypted data.

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Noda et al. in analogous art, however, disclose receiving the encrypted content (Col. 14; lines 6-8; the encrypted data is received)

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Cane et al. to include a steps of receiving the encrypted content. This modification would have been obvious because a person having ordinary skill in the art would have been motivated by the suggestions, provided by Noda et al. in order to have (Col. 1; lines 51-52) electronic device that is connected to plurality of other electronic devices through a bus, and performs data communication. This way, a device is capable of receiving and transmitting encrypted data to and from another device.

As per claim 4:

Cane et al. and Noda et al. teach all the subject matter as described above. In addition, Cane et al. further teach, a method comprising storing the second key and the encrypted data on the storage media. (Col. 4; lines 17-20; the archive server writes the encrypted file to a magnetic tape, or other medium of long term storage.) (Col. 4, lines 21-22; the encrypted key is then written to a tape index file)

As per claim 6:

Cane et al. and Noda et al. teach all the subject matter as described above. In addition, Cane et al. further teach,

retrieving the second key and the encrypted data; (Col. 4; lines 27-28; recovery of a file is accomplished by the archive server referencing the index to

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obtain the encrypted key and the volume of the encrypted file. The encrypted file is then retrieved from the volume)

decrypting the second key to form the first key; (Col. 4; lines 24-35; the secondary key must be recovered by decrypting the encrypted key with the master key.) and

decrypting the encrypted data with the first key for form a clear text. (Col. 4; lines 35-36; the original file may be recovered by decrypting the encrypted file with the secondary key.)

As per claim 7:

Cane et al. and Noda et al. teach all the subject matter as described above. In addition, Cane et al. disclose a method comprising decrypting the encrypted content with the first key to recover clear text content. (Col. 4; lines 35-36; the original file may be recovered by decrypting the encrypted file with the secondary key) and forwarding the combined encrypted data (Col. 3, lines 65-66; the encrypted file and encrypted key are then transmitted to the archive server). Not explicitly disclosed by Cane et al. is that "encrypting the clear text using a third key to form combined encrypted data." However, Cane et al. further teach the master key is used to encrypt multiple keys that will be used in encrypting successive files. (Col. 3; lines 62-63; the same master key is used to encrypt multiple secondary keys it needs to be generated once and then reused for successive secondary keys.) Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Cane et al. to include encrypting the clear text

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using a third key to form combined encrypted data. This modification would have been obvious because a person having ordinary skill in the art, at the time the invention was made, would have been motivated in order to have extra security. To maintain security and integrity of stored data by maintaining a series of keys for each archived file. (Col. 2; lines 38-39)

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cane et al. United States Letters Patent Number 5,940,507 in view of Noda et al. United States Letters Patent Number 6,671,759 and in further view of Nozawa et al. United States Letters Patent Number 5,235,641.

As per claim 5:

Cane et al. and Noda et al. teach all the subject matter as described above. In addition, Cane et al. disclose a method comprising storing the second key and the encrypted data on the storage media. Not explicitly disclosed by Cane et al. is storing the second key within a header associated the encrypted data.

Nozawa et al. in analogous art, however, disclose storing the second key within a header associated the encrypted data. (Col. 5; lines 47-48; write the encrypted data key into a header portion or the like at the beginning of an ordinary data recording area

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the method disclosed by Cane et al. to include storing the second key within a header associated the encrypted data. This modification would have been obvious because a person



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having ordinary skill in the art would have been motivated by the suggestions, provided by Nozawa et al. to retrieve the encrypted data easily by reading the header portion first. (Col. 6; lines 36-45)

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

a. Lirov et al. US Pat. No. 5,442,706

This reference pertains to a securely transmitting, searching and storing data.

b. Mangold et al. US Pat. No. 6,668,324.

This reference pertains to a method and system to protect data inside an open architecture device, such as, a personal computer.

c. Lee et al. U.S. Pat. No. 6,792,532

This reference pertains to data encryption method that is capable of transmitting an encryption algorithm and encryption data with an IEEE 1394 serial bus network.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shewaye Gelagay whose telephone number is 703-305-1338. The examiner can normally be reached on 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on 703-305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Shewaye Gelagay  
Patent Examiner  
Art Unit 2133

  
ALBERT DECADY  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100